

REMARKS

Claims 1, 2, 4-18, 20, and 22 were pending. The applicants present claims 1, 2, 4-18, 20, and 22 for examination in view of following remarks.

Claims 1, 2, 4-18, 20, and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,355,946 ("Ishinaga") in view of U.S. Pat. No. 6,335,548 ("Roberts"), alone or in further view of U.S. Pub. No. 2002/0121671 ("Wakisaka"), U.S. Pat. No. 6,707,069 ("Song"), or U.S. Pub. No. 2003/0230751 ("Harada"). The applicants traverse this rejection.

Claims 1 and 22 recite a housing body: "having a base part comprising a connector body, on which a connecting conductor material is disposed, and having a reflector part comprising a reflector body, on which a reflector material is disposed, wherein said reflector body comprises a ceramic, ... wherein the reflector body is coated with the reflector material." The cited references, alone or in combination, do not disclose or make obvious an optoelectronic component with the claimed features.

The office action asserts that Ishinaga describes a reflector body (Fig. 5, 52) disposed on a connector body (Fig. 5, 1A) but acknowledges that Ishinaga "does not teach that the reflector body comprises a ceramic."¹ The office action asserts that

[Roberts] teaches a housing body comprising ceramic (Fig. 10, 204 and Col 9 Ln 19-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the reflector body 52 of Ishinaga from ceramic as taught by Roberts in order to improve the heat dissipation in the device (Col 9 Ln 19-27).²

This argument lacks the rational underpinning necessary to support the legal conclusion of obviousness.³

The heat extraction member 204 described by Roberts is formed as a rigid body which might have a recess as shown in FIG. 10. However, the heat extraction member 204 does not have an opening arranged in the bottom region of the recess. Rather, the recess has a bottom on

¹ Office action dated May 11, 2009, pages 2-3.

² Office action dated May 11, 2009, page 3.

³ See *KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 127 S.Ct. 1727 at 1740 (2007) citing *In re Kahn*, 441 F.3d 977, 988 (C.A.Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" – emphasis added).

which a chip 202 is arranged (see Fig. 3, for example). Roberts does not disclose that the heat extraction member may be provided without a bottom. In fact, forming the heat extraction member without a bottom in the recess would make proper heat transfer from the chip to the component very difficult or even impossible. Accordingly, the heat extraction member of Roberts is not at all suited for being applied as a reflector top in the component described by Ishinaga at least because there would be no access from the body to the electrodes 2A and 28 provided on the insulating substrate of Ishinaga.

Moreover, Roberts does not disclose a ceramic which is coated with a reflector material. In particular, Roberts does not solve the problem, which was already stated in Song that "it is almost impossible to form a desired reflecting surface on the ceramic body" by coating a metal layer onto the inside surfaces of the ceramic body.⁴ Thus, Roberts does not describe that the ceramic material for its heat extraction body can be metallized. Ishinaga also fails to disclose a reflector body comprising a ceramic to be coated with a reflector material. For at least these reasons, the subject matter of the currently pending claims is patentably distinguished over Ishinaga and Roberts.

Neither Wakisaka, Song, nor Harada has been shown the remedy the deficiencies of the proposed combination of Ishinaga and Roberts. Accordingly, the applicants request that the rejection of claims 1, 2, 5-18, and 20 were rejected under 35 U.S.C. 103 as being unpatentable over Ishinaga, in view of Roberts, alone or in further view of Wakisaka, Song, or Harada be withdrawn.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicants have (a) addressed certain comments of the examiner does not mean that the applicants concede other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim

⁴ See Song, col. 2, lines 48-60.

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does not mean that the applicants concede any of the examiner's positions with respect to that claim or other claims.

No fees are believed to be due. Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 12406-216US1.

Respectfully submitted,

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Sean M. Dean, Ph.D., J.D.
Reg. No. 46,656

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (877) 769-7945

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